

# **Project Fact Sheet**

# **Official Project Name**

Atchafalaya Basin Floodway System, Louisiana Construction Project (MR&T)

## Location

Located in south-central Louisiana, the Atchafalaya Basin extends from the confluence of the Mississippi, Red and Atchafalaya rivers, near Simmesport to the Gulf of Mexico south of Morgan City. The Atchafalaya River flows generally through the middle of the basin and is flanked by the Morganza and West Atchafalaya Floodways. The project is located in parts of Avoyelles, Pointe Coupee, St. Landry, Iberville, St. Martin, Iberia, St. Mary, and Terrebonne parishes.

## **Purpose**

To safely divert up to one half of the Mississippi River Project Flood flow through the lower Atchafalaya Basin beginning at the Old River Control Structure Complex and Morganza Floodway with minimal damage to communities and land in the basin.

#### **Status**

The project is 96% physically complete and can pass about 1.1 million cubic feet per second.

# **Benefit to the Community & Project Features**

Benefit to the Community

The Atchafalaya Basin is the largest and last of the nation's great river swamps. The entire basin covers nearly 1 million acres in south-central Louisiana, stretching approximately 120 miles from north to south (not including the delta portion). The basin first began to form around 900 A.D. when the ancient Mississippi River moved from one channel to another. Its name is Choctaw in origin, from "hacha" meaning river and "falaia" meaning long.

The Atchafalaya Basin is a thriving ecosystem of hardwood forests, cypress swamps, marshes and bayous. The basin contains some of the country's most productive fish and wildlife habitat. It is a paradise for hunters, fishermen, boaters, nature photographers and outdoor enthusiasts. Forty-five species of mammals inhabit the basin. The principal big game species is the white-tailed deer. Important small game mammals include the fox squirrel, gray squirrel and swamp rabbit. Wildlife species of commercial importance include raccoon, mink and nutria. Part of the Mississippi Flyway, the basin and its forested wetlands and shallow lakes provide excellent feeding and resting grounds for migrating birds. Wading birds such as the great blue heron and great egret, and waterfowl such as the mallard and wood duck live in the basin. Numerous species of reptiles and amphibians are common, including the American alligator and western cottonmouth snake. The Louisiana black bear, a threatened wildlife species, also inhabits the basin.

Historically, a mild climate, an abundance of natural resources and unique Spanish and French cultures have attracted economic investment to the area in spite of the risks from periodic spring floods and hurricanes. Important oil and gas fields coexist with farmlands, commercial forests, and a sizable commercial fishing and trapping industry. Sport fishing is extremely popular in the Basin. Sport fish include yellow, striped and largemouth bass, and white and black crappie. Recreationally and commercially harvested shellfish include red swamp and white river crawfish, river shrimp and blue crab. The basin contains the largest contiguous bottomland hardwood forest in North America and is the largest overflow alluvial hardwood swamp remaining in the United States.

The basin also has great historical and cultural significance. Several hundred archeological sites have been uncovered in the Atchafalaya Basin, some dating back to the archaic period (circa 8,000 to 2,500 years ago). There is also a distinct clustering of prehistoric sites along the Grand and Six-Mile lakes in the lower floodway. The Chitimacha Indians, who now reside in Charenton, occupied the basin during the early years of European settlement. An estimated tribal population of 4,000 existed in 1650 and more than 15 village names and locations could still be remembered by the turn of the 20th century. Perhaps the most important immigrants to enter the basin, if not in size, than in sustained cultural influence, were the refugees expelled from the Canadian province of Acadia by the English in 1755. During the early 19th century, the Acadians, as they came to be called, settled in the swamp areas of the Atchafalaya where they developed the skills and technology necessary to survive. By intermarrying the Hispanics, Old World French, Anglo-Americans and Indians already living in the basin, these Acadians birthed a society and culture that came to be known as "Cajun." The Cajuns, with their cohesive and unique society are still associated with the Atchafalaya Basin.

#### **Features**

The USACE New Orleans District operates four locks to keep the Atchafalaya River and basin channels open for commercial barges and small boats. There are 449 miles of federal levees, 14 pumping stations and 15 drainage structures in the basin to channel and remove flood waters.

- Bayou Courtableau Control Structure provides an outlet for flood flows into the Bayou
  Courtableau Basin extending up near Alexandria. There are also two concrete weirs
  adjacent to the structure that prevent low flow losses from Bayou Courtableau into the
  West Atchafalaya Basin Levee borrow pits, making low flows available for irrigation and
  water quality control in the Teche-Vermilion Basin.
- Bayou Darbonne Control Structure at one time provided an outlet for flood flows in Bayou Courtableau, as well as for excess flows from the West Atchafalaya Basin Levee borrow pits above Highway 190. The structure now aids in passing flows that exceed the Courtableau structure's capacity.
- Bayou Sorrel Lock is located on the GIWW Alternate Route near the lower Grand River
  in Iberville Parish, approximately 15 miles southwest of Plaquemine. It is a part of the
  East Atchafalaya Basin Levee. It permits uninterrupted navigation via the GIWW,
  Morgan City-Port Allen route, between the Mississippi River to the east and the GIWW
  west of the levee. The lock also prevents the floodwaters of the Atchafalaya River from
  flooding the area north of the structure.

- Bayou Boeuf Lock is an integral part of the east levee and is part of the GIWW, permitting east-west waterborne traffic during all water stages in the basin. It is located on the south bank of Bayou Boeuf about two miles east of Morgan City, St. Mary Parish.
- Berwick Lock is located on the west side of Berwick Bay in St. Mary Parish, about two
  miles north of Berwick. The lock, in conjunction with the East Calumet Floodgate,
  prevents floodwaters from entering the Lower Atchafalaya River and Bayou Teche
  during flood stages on the Atchafalaya River. It also serves as a navigation link to Lower
  Bayou Teche.
- The Charenton Floodgate is located in the West Atchafalaya Basin Levee at the head of the Charenton Drainage Canal, about one mile north of Charenton. It controls the amount of fresh water from the Atchafalaya Basin that flows into the Charenton Drainage Canal and Bayou Teche and allows for navigation through the levee.

## **Sponsors**

The role of the local sponsors include maintaining levees and crown roads (grass cutting, surfacing and erosion control) and providing lands, easements, rights-of-way, relocations and disposal areas (LERRD) according to the act of assurances as well as the cost-sharing described in the project authorization. Local sponsors may also perform periodic inspections to ensure appropriate maintenance.

Atchafalaya Basin Levee District

Red River, Atchafalaya and Bayou Boeuf Levee District

City of Morgan City <a href="http://www.cityofmc.com/">http://www.cityofmc.com/</a>

St. Mary Parish Government <a href="http://www.parish.st-mary.la.us/">http://www.parish.st-mary.la.us/</a>

Town of Berwick http://www.townofberwick.org/home.htm

## Authority

Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1946, 1950, 1954.

## Scope

The project consists of a leveed floodway system about 15 miles wide and 110 miles long that extends generally from the Old River (near Simmesport, La.) to the gulf. The upper half of the basin is split by the leveed Atchafalaya River. The Morganza Floodway, east of the Atchafalaya River, has a capacity of 600,000 cfs which is introduced into the floodway by a gated control structure. The West Atchafalaya Floodway, west of the river, can pass an additional 900,000 cfs into the lower basin.

# Background

The Atchafalaya Basin Project is one of several Main Stem component projects that resulted from the Mississippi River and Tributaries (MR&T) project established by Congress to control the floodwaters of the Mississippi River. In response to the Great Flood of 1927, the MR&T project directed the Corps of Engineers to build a system of levees, floodways, and channel and basin improvements along the banks of the entire Mississippi River so that excessive flows reach the Gulf of Mexico with minimal damage to communities along the river. These Main Stem components include Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and others.

The MR&T legislation mandates that the system safely carry 3 million cubic feet per second (cfs) of water through the basin from the Mississippi River to the Gulf of Mexico. Where it meets the Old River, the Mississippi River can accommodate only half that amount safely, or 1.5 million cfs. To satisfy the MR&T requirement, the remaining water is diverted through a series of control structures, the Atchafalaya River and the Morganza and West Atchafalaya Floodways.